# **GENERAL NOTES**

- PROPERTY AND TOPOGRAPHIC INFORMATION TAKEN FROM CLASS A-2 SURVEY TITLED: "PROPERTY SURVEY, PROPERTY OF OUTLET BROADCASTING INC., 1422 NEW BRITAIN AVENUE, WEST HARTFORD, CONNECTICUT", SCALE: 1"=30', DATED: FEBRUARY 4, 2010, AND PREPARED BY CLOSE, JENSEN &
- NORTH ARROW, BEARINGS AND COORDINATES ARE BASED UPON THE CONNECTICUT COORDINATE SYSTEM (NAD 1983). ELEVATIONS, CONTOURS AND

CONSTRUCTION. CALL "CALL BEFORE YOU DIG", 1-800-922-4455. ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.

- INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON AVAILABLE INFORMATION AND MAY BE INCOMPLETE, AND WHERE SHOWN SHOULD BE CONFIRMED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING
- MILONE & MACBROOM INC. ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF MAPS AND DATA WHICH HAVE BEEN SUPPLIED BY OTHERS.
- ALL UTILITY SERVICES ARE TO BE UNDERGROUND. THE EXACT LOCATION, MEANS OF CONSTRUCTION, AND SIZE OF ELECTRIC, TELEPHONE, AND CABLE TELEVISION ARE TO BE DETERMINED BY THE RESPECTIVE UTILITY COMPANIES.
- 6. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL CONFORM TO THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, CONNECTICUT - 2002". AND IN ALL CASES BEST MANAGEMENT PRACTICES SHALL PREVAIL
- 8. ALL DISTURBED AREAS SHALL RECEIVE A MINIMUM OF 6" TOPSOIL, AND BE SEEDED WITH GRASS, AS SHOWN ON THE PLANS.
- 9. ALL PROPOSED CONTOURS AND SPOT ELEVATIONS INDICATE FINISHED GRADE.
- 10. ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM TO THE TOWN OF WEST HARTFORD REQUIREMENTS AND TO THE APPLICABLE SECTIONS OF THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL
- 11. THE PLANS REQUIRE A CONTRACTOR'S WORKING KNOWLEDGE OF LOCAL, MUNICIPAL, WATER AUTHORITY, AND STATE CODES FOR UTILITY SYSTEMS. ANY CONFLICTS BETWEEN MATERIALS AND LOCATIONS SHOWN, AND LOCAL REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE EXECUTION OF WORK. THE ENGINEER WILL NOT BE HELD LIABLE FOR COSTS INCURRED TO IMPLEMENT OR CORRECT WORK
- 12. ALL FUEL, OIL, PAINT, OR OTHER HAZARDOUS MATERIALS USED DURING CONSTRUCTION SHOULD BE STORED IN A SECONDARY CONTAINER AND REMOVED TO A LOCKED INDOOR AREA WITH AN IMPERVIOUS FLOOR DURING NON-WORK HOURS.

# **EROSION CONTROL NOTES CONTRACTOR RESPONSIBILITIES**

- 1. SEDIMENT AND EROSION CONTROLS SHALL BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCH OR GREATER. A LOG OF SUCH INSPECTIONS SHALL BE MAINTAINED AT THE SITE.
- 2. THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MODIFIED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER AND THE TOWN'S DESIGNATED REPRESENTATIVE AS NECESSITATED BY CHANGING SITE CONDITIONS
- 3. INSPECTION OF THE SITE FOR EROSION SHALL CONTINUE FOR A PERIOD OF THREE MONTHS AFTER COMPLETION WHEN RAINFALLS OF ONE INCH OR MORE OCCUR.
- 4. ALL DEWATERING WASTE WATERS SHALL BE DISCHARGED IN A MANNER WHICH MINIMIZES THE DISCOLORATION OF THE RECEIVING WATERS. 5. THE SITE SHOULD BE KEPT CLEAN OF LOOSE DEBRIS, LITTER, AND BUILDING MATERIALS SUCH THAT NONE OF THE ABOVE ENTER WATERS OR
- 6. A COPY OF ALL PLANS AND REVISIONS, AND THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MAINTAINED ON-SITE AT ALL TIMES DURING
- 7. ALL CATCH BASIN SUMPS SHOULD BE INSPECTED AFTER CONSTRUCTION COMPLETION AND SEDIMENT REMOVED. THE SEDIMENT SHALL BE

#### **ZONING DATA TABLE BS - SHOPPING CENTER DISTRICT** REQUIRED/PERMITTED PROVIDED 200,000 S.F. MINIMUM 243,983 S.F. LOT FRONTAGE (LF) 300 FT. MINIMUM 6% 20% 50 FT. 210 FT. 50 FT. REAR YARD 50 FT. SIDE YARD 50 FT. 99 FT. 80,000 SQ.FT. MAXIMUM 14,765 S.F. BUILDING SIZE 45 FT. MAXIMUM/ 4 STORIES **BUILDING HEIGHT** 43 FT. PROPOSED **EXISTING** IMPERVIOUS COVERAGE 33.8% 32.3% PARKING DATA

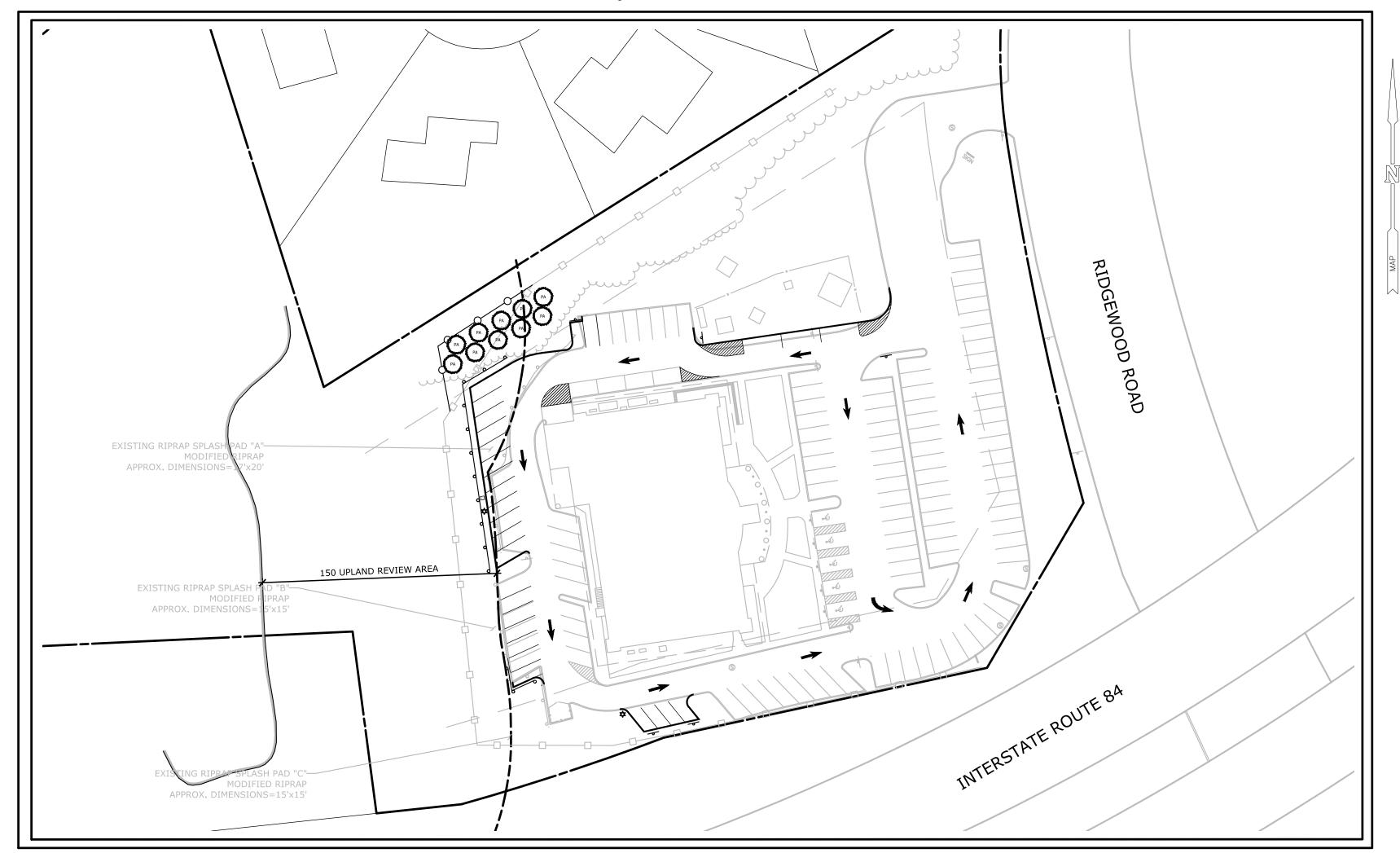
#### EXISTING PROPOSED STANDARD SPACES OMPACT SAPCES TOTAL PARKING 134 113



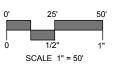
# NBC STUDIOS PARKING EXPANSION

# 1422 NEW BRITAIN AVENUE WEST HARTFORD, CT

MMI #7000-01 JANUARY 23, 2020



# **PROJECT SITE VICINITY MAP:**

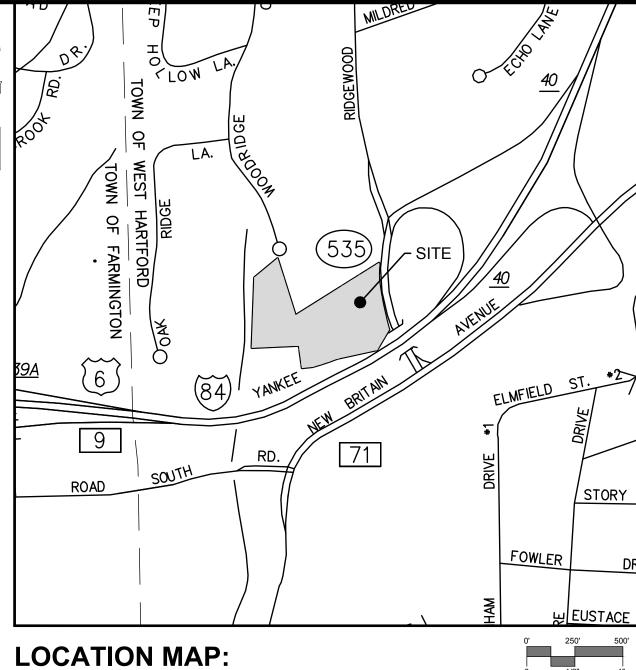


# PREPARED FOR:

MR. RYAN MACLEOD NBC UNIVERSAL 1422 NEW BRITAIN AVENUE WEST HARTFORD, CT 06110

# **PREPARED BY:**

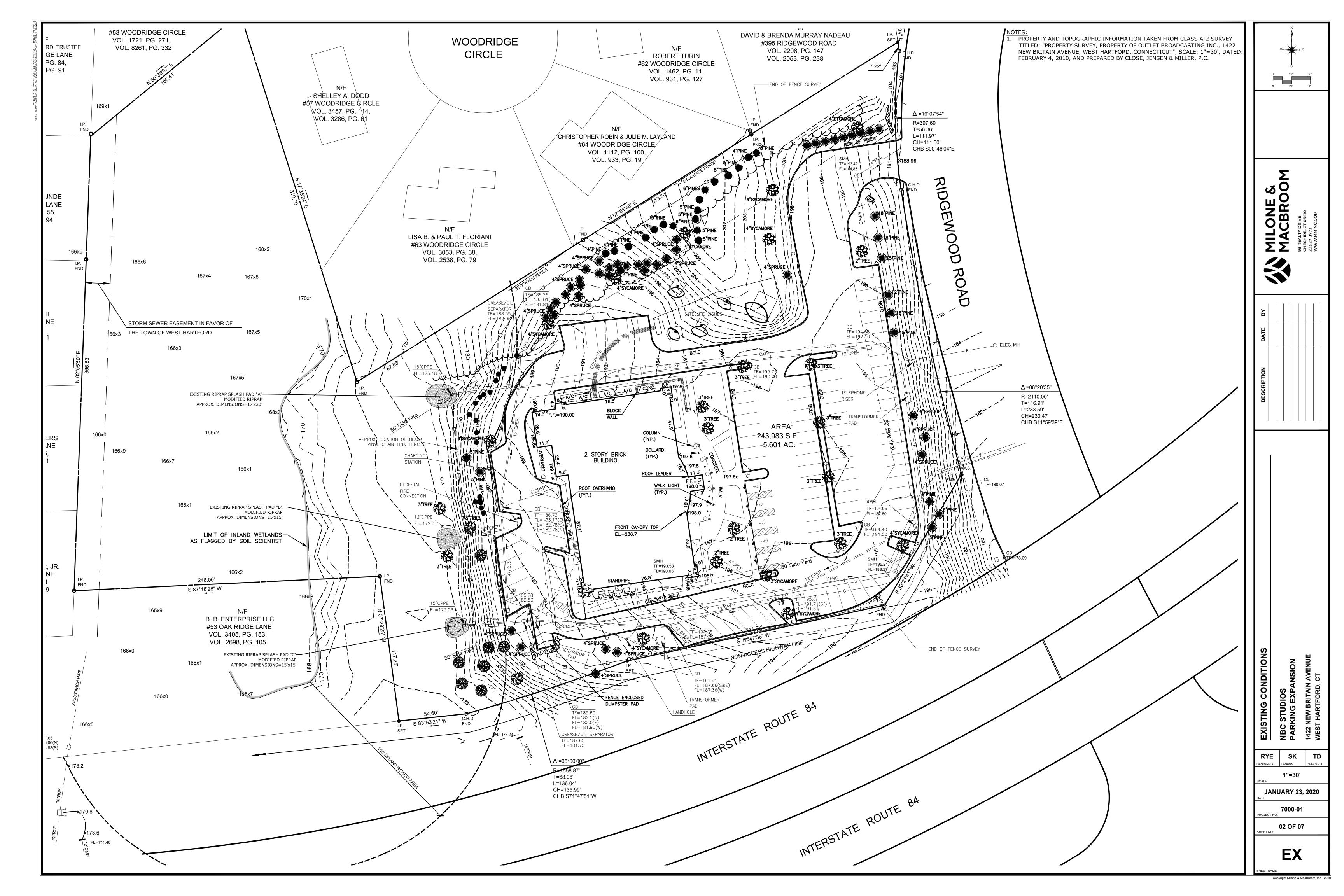
99 REALTY DRIVE CHESHIRE, CT 06410 203.271.1773 WWW.MMINC.COM

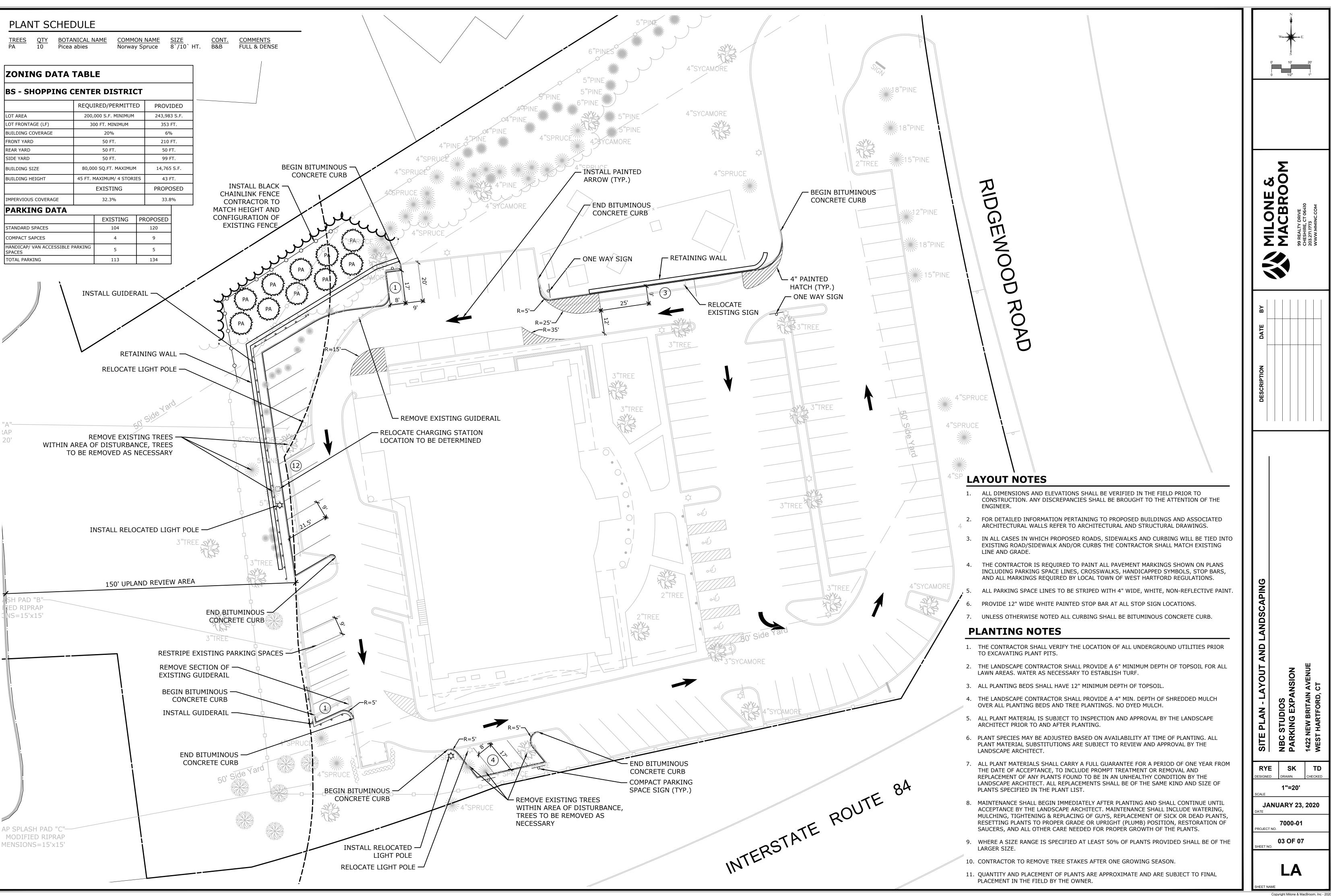


EXISTING	<u>LEGEND</u>	PROPOSED
	STREET LINE	
	PROPERTY LINE	
	SETBACK LINE	
————70————	MAJOR CONTOUR	
————68————	MINOR CONTOUR	98
× 70.5	SPOT GRADE	<b>+</b> 70.5
	TREE LINE	
	TREE/ SHRUB	
000000000000000000000000000000000000000	STONEWALL	•
$\dot{\Sigma}$	SITE LIGHT	•
**	HYDRANT	*
9WV	WATER VALVE	OWA
$^{\circ}\!$	GAS VALVE	<sup>o</sup> g∨
	CATCH BASIN	
0	MANHOLE/YARD DRAIN	
	SANITARY SEWER W/MANHOLE	san ( <u>)</u>
	STORM DRAIN	
	WATER MAIN	w
G	GAS MAIN	G
E	ELECTRIC LINE	E
ETC	ELECTRIC, TELEPHONE, CABLE	ETC
O	UTILITY POLE	Q
	TRAFFIC SIGN	
0	IRON PIPE	•
۰	MONUMENT	
	EDGE OF PAVEMENT W/CURB	
000000.	GUARD RAIL	. <u> </u>
<del></del>	CHAIN LINK FENCE	<del></del>
	WATERCOURSE	

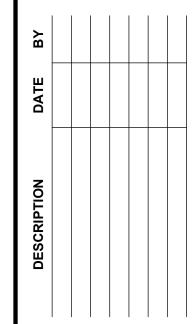
<u> </u>	OI DIV	AVIIICO
NO.	NAME	TITLE
01		TITLE SHEET
02	EX	EXISTING CONDITIONS
03	LA	SITE PLAN - LAYOUT AND LANDSCAPING
04	GU	SITE PLAN - GRADING AND UTILITIES
05	SE-1	SEDIMENT AND EROSION CONTROL PLAN
06	SE-2	SEDIMENT AND EROSION CONTROL DETAILS AND SPECIFICATIONS
07	SD-1	SITE DETAILS
80	SD-2	SITE DETAILS

# LIST OF DRAWINGS





MILONE 8

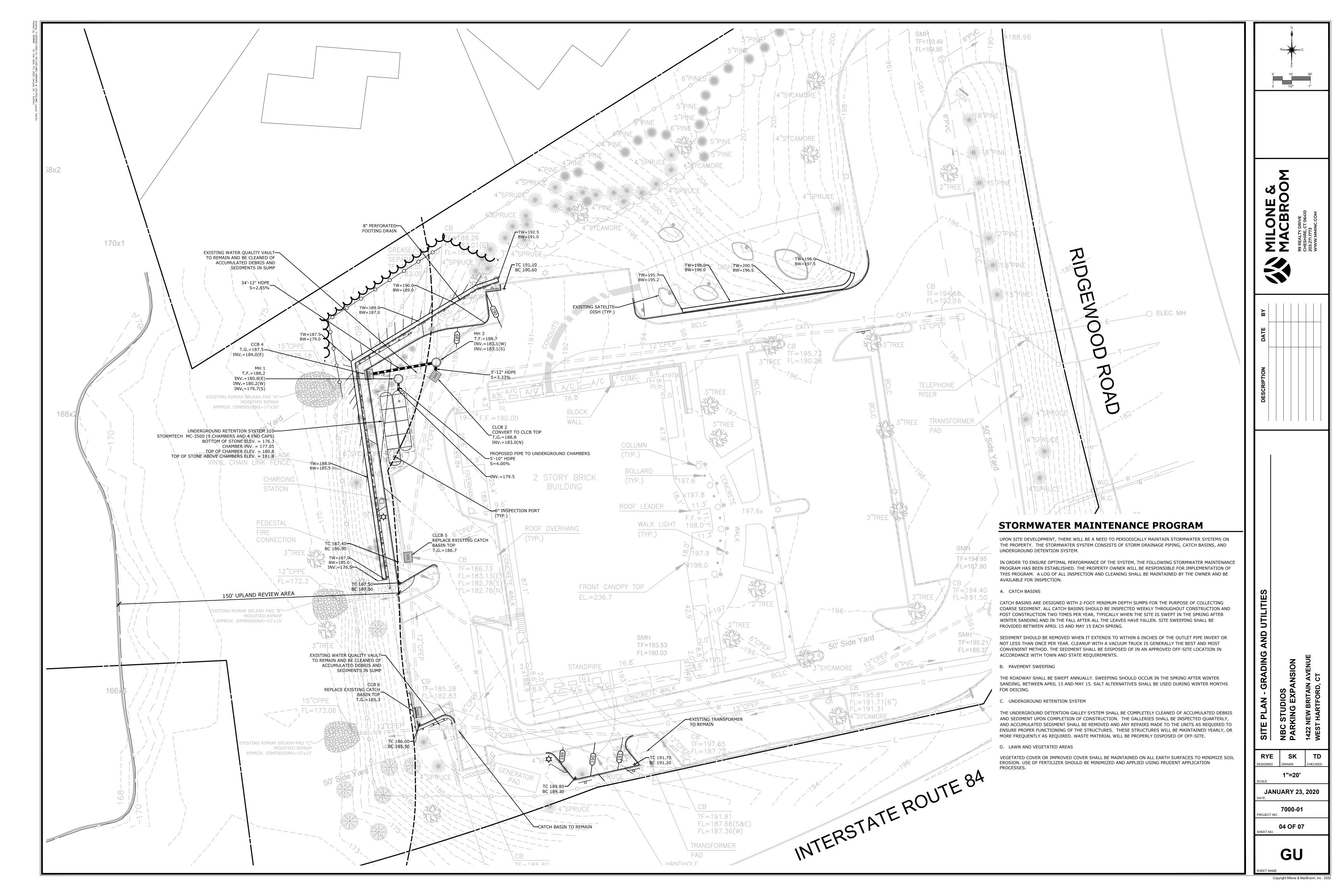


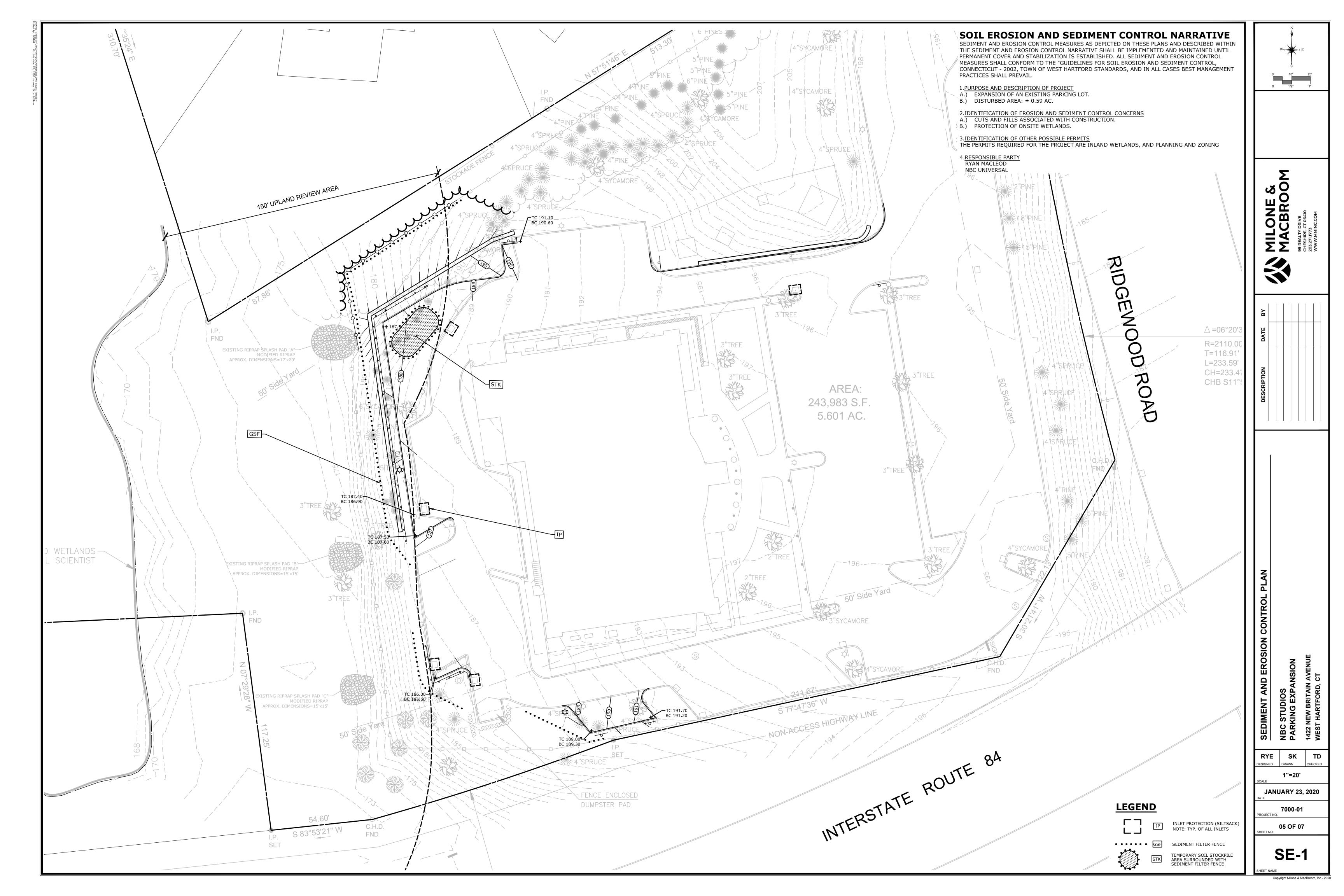
SK TD

1"=20'

**JANUARY 23, 2020** 

7000-01 03 OF 07





# SEDIMENT AND EROSION CONTROL SPECIFICATIONS

#### GENERAL:

THESE GUIDELINES SHALL APPLY TO ALL WORK CONSISTING OF ANY AND ALL TEMPORARY AND/OR PERMANENT MEASURES TO CONTROL WATER POLLUTION AND SOIL EROSION, AS MAY BE REQUIRED, DURING THE CONSTRUCTION OF THE PROJECT. IN GENERAL, ALL CONSTRUCTION ACTIVITIES SHALL PROCEED IN SUCH A MANNER SO AS NOT TO POLLUTE ANY WETLANDS, WATERCOURSE, WATERBODY, AND CONDUIT CARRYING WATER, ETC. THE CONTRACTOR SHALL LIMIT, INSOFAR AS POSSIBLE, THE SURFACE AREA OF EARTH MATERIALS EXPOSED BY CONSTRUCTION METHODS AND IMMEDIATELY PROVIDE PERMANENT AND TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT

CONTAMINATION OF ADJACENT WETLANDS, WATERCOURSES, AND WATERBODIES, AND TO PREVENT, INSOFAR AS POSSIBLE, EROSION ON THE SITE.

#### AND GRADING

#### GENERAL:

- 1. THE RESHAPING OF THE GROUND SURFACE BY EXCAVATION AND FILLING OR A COMBINATION OF BOTH, TO OBTAIN PLANNED GRADES, SHALL PROCEED IN
- ACCORDANCE WITH THE FOLLOWING CRITERIA:

  a. THE CUT FACE OF EARTH EXCAVATION SHALL NOT BE STEEPER THAN TWO
- HORIZONTAL TO ONE VERTICAL (2:1).
  b. THE PERMANENT EXPOSED FACES OF FILLS SHALL NOT BE STEEPER THAN TWO
- HORIZONTAL TO ONE VERTICAL (2:1).
- c. THE CUT FACE OF ROCK EXCAVATION SHALL NOT BE STEEPER THAN ONE HORIZONTAL TO FOUR VERTICAL (1:4).
   d. PROVISION SHOULD BE MADE TO CONDUCT SURFACE WATER SAFELY TO STORM
- DRAINS TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FILL SLOPES.
- e. EXCAVATIONS SHOULD NOT BE MADE SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTY WITHOUT PROTECTING SUCH PROPERTY FROM FROSION, SLIDING, SETTLING, OR CRACKING
- EROSION, SLIDING, SETTLING, OR CRACKING.

  f. NO FILL SHOULD BE PLACED WHERE IT WILL SLIDE OR WASH UPON THE PREMISES OF ANOTHER OWNER OR UPON ADJACENT WETLANDS,

  WATERCOURSES, OR WATERPONIES.
- WATERCOURSES, OR WATERBODIES.

  g. PRIOR TO ANY REGRADING, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PLACED AT THE ENTRANCE TO THE WORK AREA IN ORDER TO REDUCE MUD AND OTHER SEDIMENTS FROM LEAVING THE SITE.

#### TOPSOILING

## GENERAL

- 1. TOPSOIL SHALL BE SPREAD OVER ALL EXPOSED AREAS IN ORDER TO PROVIDE A SOIL MEDIUM HAVING FAVORABLE CHARACTERISTICS FOR THE ESTABLISHMENT, GROWTH, AND MAINTENANCE OF VEGETATION.
- UPON ATTAINING FINAL SUBGRADES, SCARIFY SURFACE TO PROVIDE A GOOD BOND WITH TOPSOIL.
   REMOVE ALL LARGE STONES, TREE LIMBS, ROOTS AND CONSTRUCTION DEBRIS.
- 4. APPLY SOIL AMENDMENTS AS FOLLOWS:

  LIME: ACCORDING TO SOIL TEST OR AT THE RATE OF 2 TONS PER ACRE.

#### ROCK DUST: ACCORDING TO SOIL TEST OR AT THE RATE OF 2 TONS PER ACRE

#### EDIAL.

- 1. TOPSOIL SHOULD HAVE PHYSICAL, CHEMICAL, AND BIOLOGICAL CHARACTERISTICS
- FAVORABLE TO THE GROWTH OF PLANTS.
- TOPSOIL SHOULD HAVE A SANDY OR LOAMY TEXTURE.
   TOPSOIL SHOULD BE RELATIVELY FREE OF SUBSOIL MATERIAL AND MUST BE FREE OF LARGE STONES, LUMPS OF SOIL, ROOTS, TREE LIMBS, TRASH, OR CONSTRUCTION DEBRIS. IT SHOULD BE FREE OF ROOTS OR RHIZOMES SUCH AS THISTLE, NUTGRASS,
- AND QUACKGRASS.

  4. AN ORGANIC MATTER CONTENT OF SIX PERCENT (6%) IS REQUIRED. AVOID LIGHT COLORED SUBSOIL MATERIAL.
- 5. SOLUBLE SALT CONTENT OF LESS THAN 400 PPM IS REQUIRED.
  5. THE TOPSOIL SHALL BE WARRANTED BY SELLER TO BE FREE OF DETECTABLE RESIDUES OF CHEMICAL PESTICIDES, HERBICIDES, PETROLEUM PRODUCTS, OR

#### APPLICATION:

- . AVOID SPREADING WHEN TOPSOIL IS WET OR FROZEN.
- 2. SPREAD TOPSOIL UNIFORMLY TO A DEPTH OF AT LEAST FOUR INCHES (4"), OR TO THE DEPTH SHOWN ON THE LANDSCAPING PLANS.

#### TEMPORARY VEGETATIVE COVER

OTHER UNSUITABLE TOXINS.

TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED ON ALL UNPROTECTED AREAS THAT PRODUCE SEDIMENT, AREAS WHERE FINAL GRADING HAS BEEN COMPLETED, AND AREAS WHERE THE ESTIMATED PERIOD OF BARE SOIL EXPOSURE IS LESS THAN 12 MONTHS. TEMPORARY VEGETATIVE COVER SHALL BE APPLIED IF AREAS WILL NOT BE PERMANENTLY SEEDED BY SEPTEMBER 1.

# GENERAL

- 1. INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
- REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA.
   APPLY SOIL AMENDMENTS AS FOLLOWS:
- LIME: ACCORDING TO SOIL TEST OR AT THE RATE OF 1 TONS PER ACRE.
  ROCK DUST: ACCORDING TO SOIL TEST OR AT THE RATE OF 1 TONS PER ACRE

  4. UNLESS HYDROSEEDED, WORK IN LIME TO A DEPTH OF 4 INCHES WITH A DISK OR
  ANY SUITABLE EQUIPMENT. DO NOT WORK FINISHED COMPOST INTO THE SOIL -
- APPLY IT EVENLY TO SOIL SURFACE AS A SEED BED.

  5. TILLAGE SHOULD ACHIEVE A REASONABLY UNIFORM LOOSE SEEDBED. WORK ON CONTOUR IF SITE IS SLOPING.

# SITE PREPARATION:

- SELECT APPROPRIATE SPECIES FOR THE SITUATION. NOTE RATES AND SEEDING DATES (SEE VEGETATIVE COVER SELECTION & MULCHING)
- APPLY SEED UNIFORMLY ACCORDING TO THE RATE INDICATED BY BROADCASTING,
   DRILLING, OR HYDRAULIC APPLICATION.
- 3. UNLESS HYDROSEEDED, COVER RYEGRASS SEEDS WITH NOT MORE THAN 1/4 INCH OF SOIL USING SUITABLE EQUIPMENT.
- 4. MULCH IMMEDIATELY AFTER SEEDING IF REQUIRED. (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW.) APPLY STRAW AND ANCHOR TO

SLOPES GREATER THAN 3%%% OR WHERE NEEDED.

#### PERMANENT VEGETATIVE COVER

#### 05115041

PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED AS VARIOUS SECTIONS OF THE PROJECT ARE COMPLETED IN ORDER TO STABILIZE THE SOIL, REDUCE DOWNSTREAM DAMAGE FROM SEDIMENT AND RUNOFF, AND TO ENHANCE THE AESTHETIC NATURE OF THE SITE. IT WILL BE APPLIED TO ALL CONSTRUCTION AREAS SUBJECT TO EROSION WHERE FINAL GRADING HAS BEEN COMPLETED AND A PERMANENT COVER IS NEEDED.

#### SITE PREPARATION:

- INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
- REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA.
   PERFORM ALL PLANTING OPERATIONS PARALLEL TO THE CONTOURS OF THE SLOPE.
- APPLY TOPSOIL AS INDICATED ELSEWHERE HEREIN.
   APPLY SOIL AMENDMENTS AS FOLLOWS:

   LIME: ACCORDING TO SOIL TEST OR AT THE RATE OF 1 TONS PER ACRE.
- ROCK DUST: ACCORDING TO SOIL TEST OR AT THE RATE OF 1 TONS PER ACRE
  6. UNLESS HYDROSEEDED, WORK IN LIME TO A DEPTH OF 4 INCHES WITH A DISK OR
  ANY SUITABLE EQUIPMENT. DO NOT WORK FINISHED COMPOST

#### VEGETATED COVER SELECTION AND MULCHING

#### TEMPORARY VEGETATIVE COVER:

PERENNIAL RYEGRASS 5 LBS./1,000 SQ.FT. (LOLIUM PERENNE)
DUTCH WHITE CLOVER (TRIFOLIUM REPENS) 1/4 LBS PER 1000 SF. OR 6LBS/AC.

# \* PERMANENT VEGETATIVE COVER:

DUTCH WHITE CLOVER 30%
BARON KENTUCKY BLUEGRASS 30%
14MESTOWN II CHEWINGS FESCUE 20

JAMESTOWN II CHEWINGS FESCUE 20% PALMER PERENNIAL RYEGRASS 20%

NEW ENGLAND EROSION CONTROL/R3ESOTRATION MIX FOR MOIST SITES AT 1/8 LB PER 1000 S.F. FOR 5 LBS/AC.

\* LOFTS - "TRIPLEX GENERAL" MIX OR APPROVED EQUAL. RECOMMENDED RATE/TIME

#### NEW ENGLAND SHOWY WILD FLOW MIX AT 1/16 LB PER 1000 S.F. OR 2 LBS/AC

SEEDING. SPRING SEEDING: 4/1 to 5/31 FALL SEEDING: 8/16 to 10/15

#### TEMPORARY MULCHING:

STRAY 70-90 LBS./1,000 SQ.FT. (TEMPORARY VEGETATIVE AREAS) WOOD FIBER IN HYDROMULCH SLURRY 25-50 LBS./1,000 SQ. FT.

#### \_\_\_\_

- ESTABLISHMENT: 1. SMOOTH AND FIRM SEEDBED WITH CULTIPACKER OR OTHER SIMILAR EQUIPMENT
- PRIOR TO SEEDING (EXCEPT WHEN HYDROSEEDING).

  2. SELECT ADAPTED SEED MIXTURE FOR THE SPECIFIC SITUATION. NOTE RATES AND THE SEEDING DATES (SEE VEGETATIVE COVER SELECTION & MULCHING SPEC.
- BELOW).
  3. APPLY SEED UNIFORMLY ACCORDING TO RATE INDICATED, BY BROADCASTING,
- DRILLING, OR HYDRAULIC APPLICATION.

  4. COVER GRASS AND LEGUME SEED WITH NOT MORE THAN 1/4 INCH OF SOIL WITH
- COVER GRASS AND LEGUME SEED WITH NOT MORE THAN 1/4 INCH OF SOIL WITH SUITABLE EQUIPMENT (EXCEPT WHEN HYDROSEEDING).
   MULCH IMMEDIATELY AFTER SEEDING, IF REQUIRED, ACCORDING TO TEMPORARY
- MULCHING SPECIFICATIONS. (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW).
- 6. USE PROPER INOCULAT ON ALL LEGUME SEEDLINGS, USE FOUR (4) TIMES NORMAL RATES WHEN HYDROSEEDING.
- RATES WHEN HYDROSEEDING.

  7. USE SOD WHERE THERE IS A HEAVY CONCENTRATION OF WATER AND IN CRITICAL AREAS WHERE IT IS IMPORTANT TO GET A QUICK VEGETATIVE COVER TO PREVENT

#### MAINTENANCE:

1. TEST FOR SOIL ACIDITY EVERY THREE (3) YEARS AND LIME AS REQUIRED.

#### EROSION CHEC

#### GENERAL:

1. TEMPORARY PERVIOUS BARRIERS USING BALES OF HAY OR STRAW, HELD IN PLACE WITH STAKES DRIVEN THROUGH THE BALES AND INTO THE GROUND OR GEOTEXTILE FABRIC FASTENED TO A FENCE POST AND BURIED INTO THE GROUND, SHALL BE INSTALLED AND MAINTAINED AS REQUIRED TO CHECK EROSION AND REDUCE SEDIMENTATION.

## CONSTRUCTION

- 1. BALES SHOULD BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE
- ADJACENT BALES.

  2. EACH BALE SHALL BE EMBEDDED INTO THE SOIL A MINIMUM OF FOUR (4") INCHES.

  3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY WOOD STAKES OR REINFORCEMENT BARS DRIVEN THROUGH THE BALES AND INTO THE GROUND. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD THE PREVIOUSLY LAID BALE
- TO FORCE BALES TOGETHER.

  4. GEOTEXTILE FABRIC SHALL BE SECURELY ANCHORED AT THE TOP OF A THREE FOOT (3') HIGH FENCE AND BURIED A MINIMUM OF FOUR INCHES (4") TO THE SOIL. SEAMS BETWEEN SECTIONS OF FILTER FABRIC SHALL OVERLAP A MINIMUM OF TWO FEET (2').

# INSTALLATION AND MAINTENANCE:

- BALED HAY EROSION BARRIERS SHALL BE INSTALLED AT ALL STORM SEWER INLETS.
   BALED HAY EROSION BARRIERS AND GEOTEXTILE FENCE SHALL BE INSTALLED AT THE LOCATION INDICATED ON THE PLAN AND IN ADDITIONAL AREAS AS MAY BE DEEMED APPROPRIATE DURING CONSTRUCTION.
- 3. ALL EROSION CHECKS SHALL BE MAINTAINED UNTIL ADJACENT AREAS ARE STABILIZED.
- I. INSPECTION SHALL BE FREQUENT (AT MINIMUM MONTHLY AND BEFORE AND AFTER HEAVY RAIN) AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

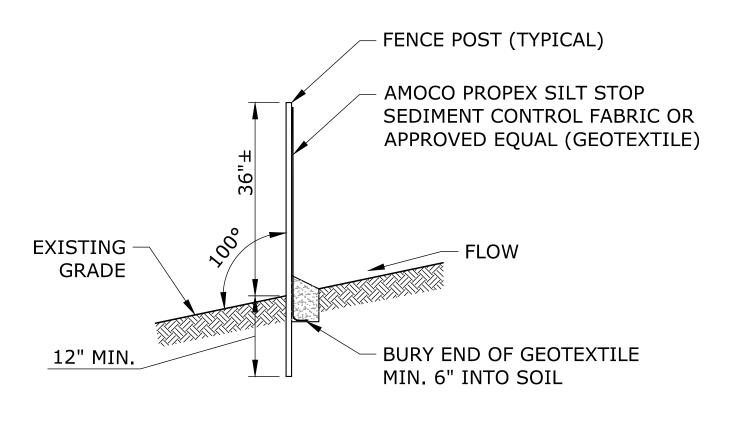
USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORMWATER FLOW OR DRAINAGE.

EROSION CHECKS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR

# INSTALLATION DETAIL DUMP STRAP 1" REBAR FOR BAG REMOVAL FROM INLET OPTIONAL METAL HANGING FRAME FOR TRAFFIC CONDITIONS LENGTH = L

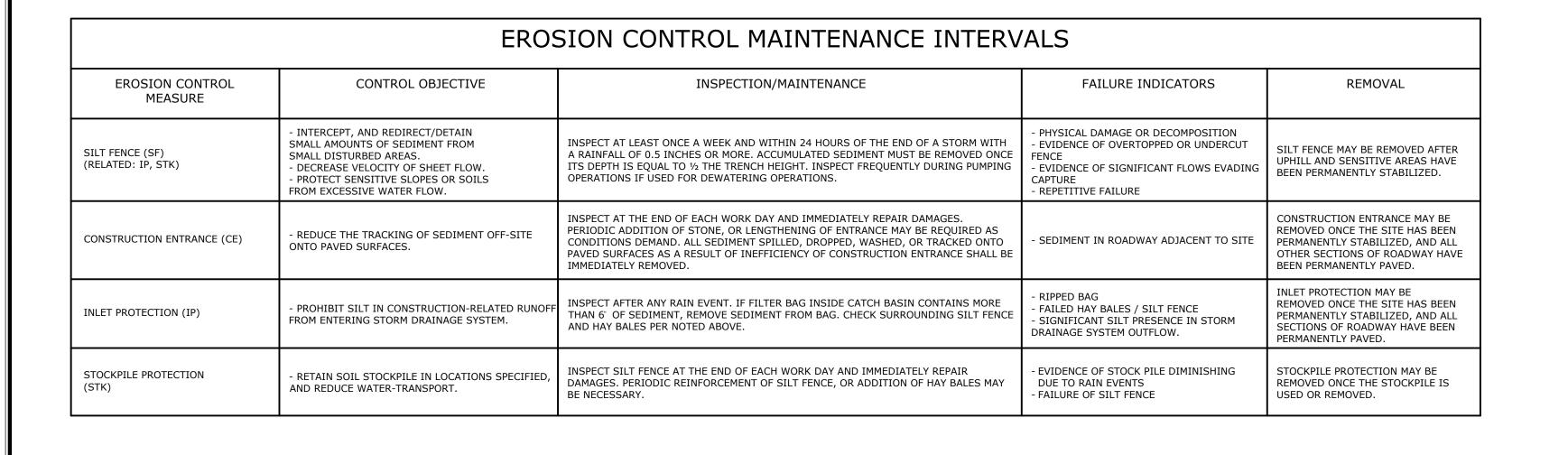
**INLET PROTECTION** 

DUMP STRAPS



SEDIMENT FILTER FENCE

NOT TO SCALE



ONTROL DETAILS AND SPECIFICATIONS

DESCRIPTION

DATE BY

NBC STUDIOS PARKING EXPANSION

SK

**AS NOTED** 

**JANUARY 23, 2020** 

7000-01

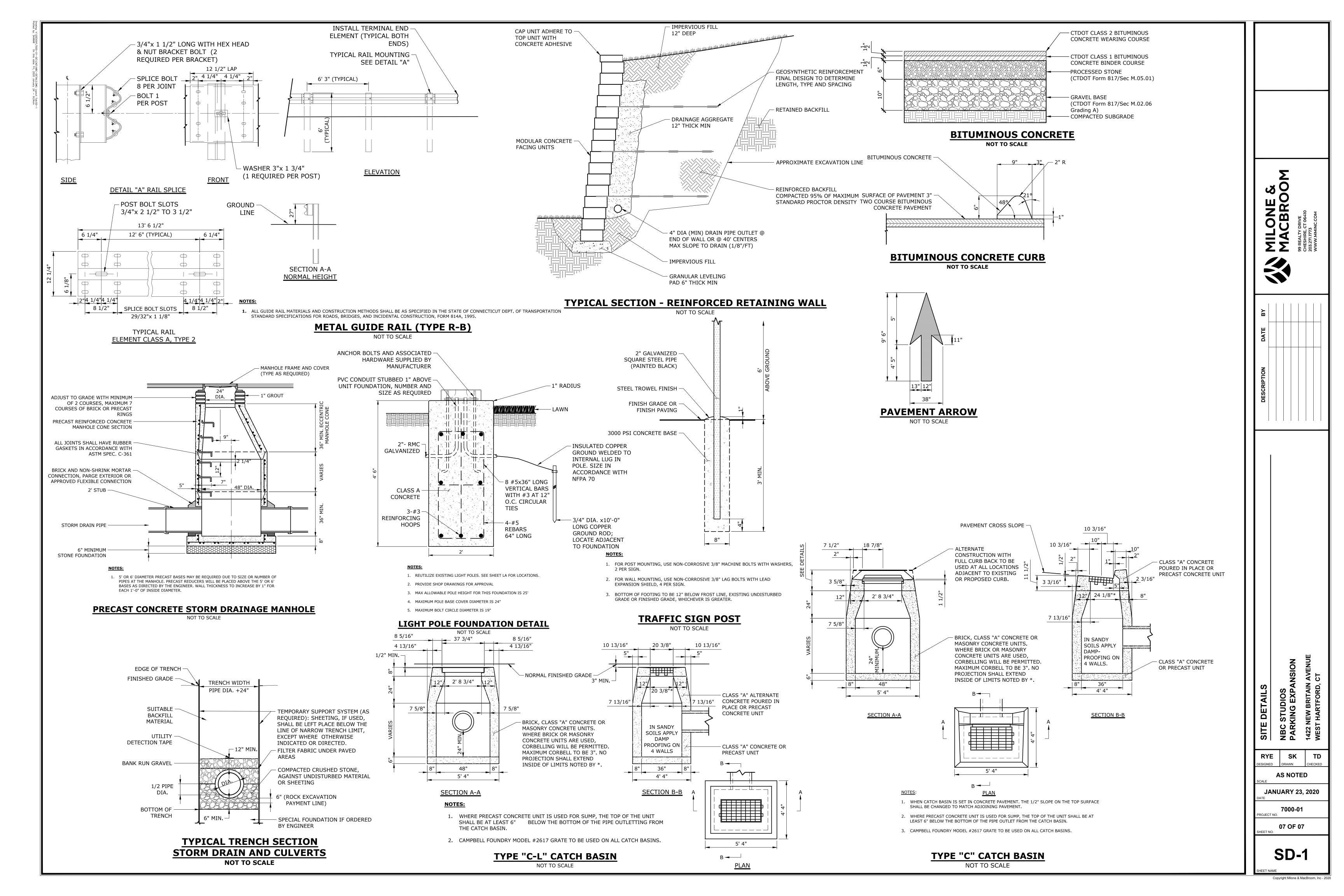
06 OF 07

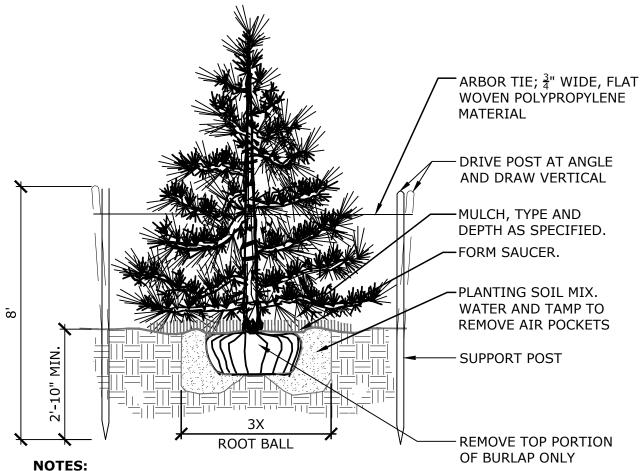
Copyright Milone & MacBroom, Inc - 2020

TD

RYE

MILONE & MACBROOM
99 REALTY DRIVE
CHESHIRE, CT 06410
203.271.11773





CONTRACTOR SHALL EXCAVATE A SINGLE CONTINUOUS

TRENCH FOR ALL EVERGREEN PLANTING.

PROVIDE STAKING AS REQUIRED.

**BOULDERS 18"** 3. PLANT SO THAT ROOT FLARE IS EXPOSED AND THE TOP OF BELOW SUBGRADE ROOT BALL IS EVEN WITH THE FINISHED GRADE.

NOTE: REMOVE ALL

4. PAINT ALL CUTS.

REMOVE ALL CONTAINERS AND BASKETS FROM ROOT BALL.

6. REMOVE BURLAP FROM TOP OF ROOT BALL.

# **EVERGREEN TREE PLANTING**

**NOT TO SCALE** 

#### STORMWATER CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH MC-3500 OR APPROVED EQUAL
- 2. CHAMBERS SHALL BE MADE FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOADS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- 7. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. THE CHAMBER MANUFACTURER SHALL SUBMIT THE FOLLOWING UPON REQUEST TO THE SITE DESIGN ENGINEER FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE
- a. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY AASHTO FOR THERMOPLASTIC PIPE.
- b. A STRUCTURAL EVALUATION SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATES THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET. THE 50 YEAR CREEP MODULUS DATA SPECIFIED IN ASTM F2418 MUST BE USED AS PART OF THE AASHTO STRUCTURAL EVALUATION TO VERIFY LONG-TERM PERFORMANCE
- c. STRUCTURAL CROSS SECTION DETAIL ON WHICH THE STRUCTURAL EVALUATION IS BASED.
- 8. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

## IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-3500 CHAMBER SYSTEM

- STORMTECH MC-3500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- 2. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- 3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS.

#### STORMTECH RECOMMENDS 3 BACKFILL METHODS: STONESHOOTER LOCATED OFF THE CHAMBER BED.

BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE. BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.

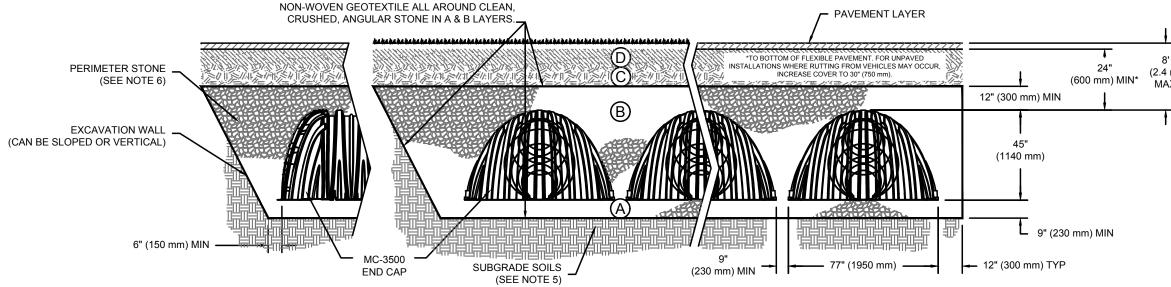
- 4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- 5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- 6. MAINTAIN MINIMUM 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
- 7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- 8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm) MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
- 9. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING..
- 10. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE

#### NOTES FOR CONSTRUCTION EQUIPMENT

- 1. STORMTECH MC-3500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- 2. THE USE OF EQUIPMENT OVER MC-3500 CHAMBERS IS LIMITED:
- NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- WEIGHT LIMITS FOR CONSRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE". 3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



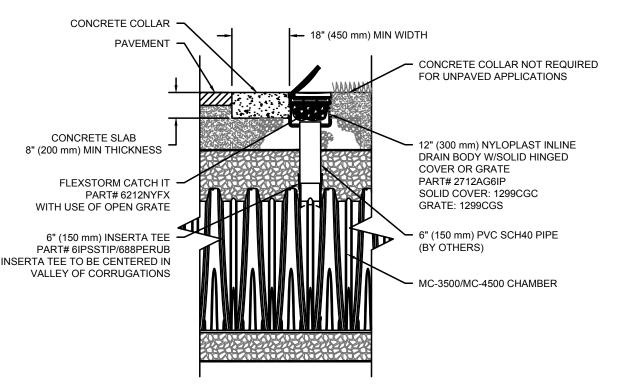
- 1. MC-3500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- 2. MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- 3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- 4. THE "SITE DESIGN ENGINEER" REFERS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN AND LAYOUT OF THE STORMTECH CHAMBERS FOR THIS PROJECT
- 5. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- 6. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- ONCE LAYER 'C' IS PLACED. ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
С	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE.  MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 <sup>1</sup> A-1, A-2-4, A-3  OR  AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
В	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43 <sup>1</sup> 3, 4	
А	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43 <sup>1</sup> 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>23</sup>

1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED,

STORMTECH COMPACTION RÉQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR. 3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

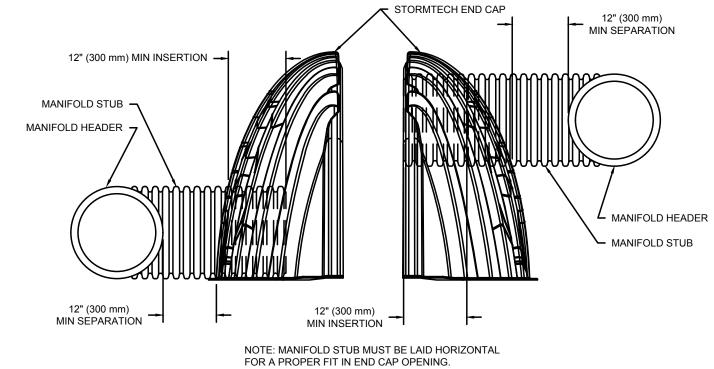
# ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS



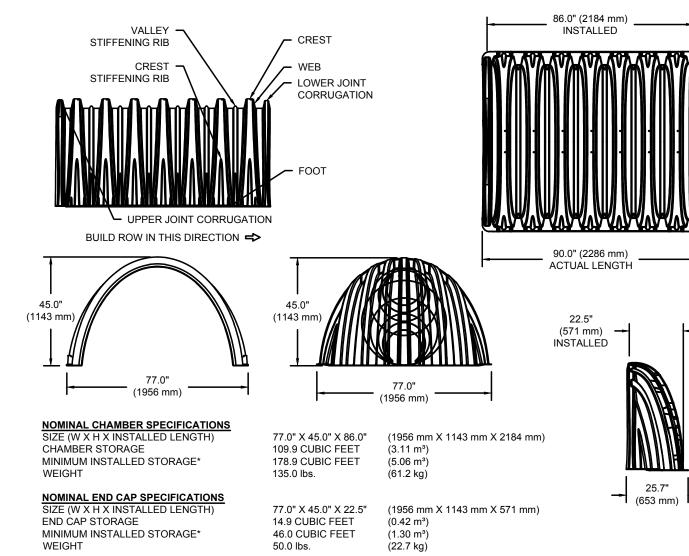
**6" INSPECTION PORT DETAIL** 

**UNDERGROUND RETENTION SYSTEM STORMTECH MC-3500 TYPICAL DETAILS** 

**NOT TO SCALE** 



# MC-SERIES END CAP INSERTION DETAIL



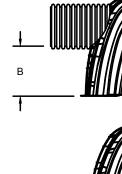
\*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY

# STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"

PART#	STUB	В	С
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	
MC3500IEPP06B			0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	
MC3500IEPP08B			0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	
MC3500IEPP10B			0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	26.36" (670 mm)	
MC3500IEPP12B			1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	
MC3500IEPP15B	10 (0/0/11111)		1.50" (38 mm)
MC3500IEPP18TC	18" (450 mm)	20.03" (509 mm)	
MC3500IEPP18BC			1.77" (45 mm)
MC3500IEPP24TC	24" (600 mm)	14.48" (368 mm)	
MC3500IEPP24BC	2 <del>4</del> (600 mm)		2.06" (52 mm)
MC3500IEPP30BC	30" (750 mm)		

CUSTOM PRECORED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-3500 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm) THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHTEST POSSIBLE FOR THE PIPE SIZE.

MC-3500 TECHNICAL SPECIFICATION



SD-2

NBC STUDIOS PARKING EXPANSION

SK

**AS NOTED** 

**JANUARY 23, 2020** 

08 OF 07

RYE

ONE CBRO